ABSTRACT OF THE DISCLOSURE

A control apparatus calculates a exhaust gas air-fuel ratio of a plurality of cylinders, in which the operation angle of an intake valve is set to a predetermined operation angle, e.g., a maximum operation angle, based on a value output from an air-fuel ratio sensor so as to minimize a variation in an fuel injection quantity between the plurality of cylinders by that exhaust gas air-fuel ratio. That is, the exhaust gas air-fuel ratio of the plurality of cylinders, in which the valve opening characteristics of the intake valve and an exhaust valve are set such that the intake air amount to be introduced into the plurality of cylinders is limited by the opening amount of a throttle valve, for example, and not limited by the valve opening characteristics of the intake valve or the exhaust valve is calculated, and the variation in the fuel injection quantity among the plurality of cylinders is then reduced by that exhaust gas air-fuel ratio. Then, the variation in valve opening characteristics among the cylinders is reduced.